Introduction

Vantage, the lighting company has sold thousands of QLink lighting solutions in the past. Up until now, a Control4 dealers has not had a resource to integrate this lighting system. This required the customer to extensively upgrade their lighting system just so Control4 would control it. Well not any-more! This driver is a RS232 driver that provides full 2 way feedback of Lights, Enclosure Modules, Dimmers, Low-Voltage Relay stations and scene point modules. By integrating these devices into the existing Control4 software, a customer is given almost the same features that a typical Control4 system can in the home without the need to update the Vantage. In addition, Cinegration worked with existing Vantage programmers and found a way for a dealer to program the Control4 system without the need to 'know' how Vantage 'works'!

Test before you install

We recognise that it may not be easy to test this driver in the office as the Vantage QLink system may well be on your customer's site. However it is really important that you are not trying to install this on the Friday afternoon before the property is supposed to be handed over. Your first installation may take a little longer than you expect!

Driver Features:

Main Driver

- RS232 interface to any Control4 controller
- Simple driver setup action for easy and fast integration
- Custom programming tab for advanced users that know Vantage! (Direct V-Command support)
- Task execution
- Keypad Button Push/Release as an Event and Action (Station Load)
- Control4 Relay Proxy integration

Slave Light Driver (Enclosure or Station Load)

- Allows dealer to turn on/off individual lights in the program from any Control4 navigator
- Light State Feedback via all Control4 interfaces
- Compatible with Station loads, Enclosure loads, Low-Voltage relays and more

Driver Installation/Explanation of options:

It is recommended that you know how Vantage works before you integrate it into Control4. Integrating Vantage requires the knowledge of Enclosure and station load addresses and while some of it can be found via simple logic, some (station load's specifically) require knowledge of the Vantage program.

Wiring for RS232:
- Control4 and Vantage require a RS232 cable to be connected between the two systems. While there is a RS232 port on the front of the controller, Vantage recommends you using the spot located behind the main panel.   If possible, connect to Port - A (the screw down terminals located on the back of the main processor.
  - Connecting to Port A:
    - Loosen the screws to the left and right of the processor and pull (it will be kind of hard to pull off)
    - BE CAREFULL!!!!! (There is live wiring in here)
    - Screw down Ground, TX and RX under Port-A (see attached picture)
      - (Note: if during installation, you don't get any feedback information try swaping TX and   RX around
    - Once this is done, snap processor back on.   This should cause the vantage processor to load back up
  - Connecting to the front port
    - Connect to it using a DB25 to DB9 adapter
    - Note: you will need to modify the front enclosure panel to allow the door to close.

Finding the address of an Enclosure load:

Finding the address of an Enclosure load:
- Enclosure Load
  - The address is broken down into 4 sets each separated by a -
  - a-b-c-d
    - a: The Enclosure Number (this starts at 0 for the first enclosure and goes up from there)
    - b: controller number
    - c: module number
    - d: load number
  - Each address must be assigned in this manner for the program to work.

- Station Load:
  - a-b-c
    - a: Controller Number
    - b: Station Number
    - c: Load Number
  - *Control4 Driver Setup*
    - Main Driver Setup
      - Once the RS232 binding has been made, Under Actions, press Setup Communication.   This will setup RS232 communication with QLink

including how RS232 are supposed to be formatted and transmitted
- Begin adding in Lights into the project
- Relay Addresses:
  - Control4 uses relay proxies that allow customers to visually 'see' certain motors in the home via the Control4 interface.   These include, fireplaces, fans, fountains, Motors, Heat tape etc...   The point of entering the address of the low-voltage station load here is that the dealer can create this mapped point in the Control4 program.
- Property: Vantage CMD Send Delay
  - This property delays the sending of messages to Vantage so as to not overload a vantage program.   This can happen when the customer has multiple controllers linked together.   The delay is in milliseconds and the default is 20

- Slave Device Setup (Dimmer/Switch)
  - It is assumed that the main driver is already installed and communication is setup between Qlink and Control4
  - Under Properties
    - Enter the Light Address
      - This can be either a Enclosure load (represented by 4 digits separated by a -) or a Station lod (represented by 3 digits separated by a -)
      - Load Type will automatically be updated to reflect the load type
    - The Driver Information tab is designed to help a dealer during setup and troubleshooting
      - There different outputs for this field and will explain how the light is communicating with Vantage or only with the main driver
      - Upon entering an address, the driver will ask the Qlink system what the loads current status is.   If a reply is received Driver Information will update to reflect.

Once this is done the driver should be ready for deployment.

Events/Actions/Variables:
- Main Driver Composer Events
  - Station Load Button Release/Press
    - This event fires when a station button has been pressed or released
- Light Driver Events
  - Level Changes
    - This will fire when Control4 receives a level change from Vantage
- Main Driver Variables
  - None
- Light Driver Variables
  - Light Level, Light State
- Main Driver Coposer Actions
  - PRESS_STATION_BUTTON

- ▪ Arguments
  - • ADDRESS
    - ◦ This is the address of the station button (0-0-0)
  - • CHANGE_TO
    - ◦ OFF (Turns off the station button)
    - ◦ ON (Turns on the station button)
    - ◦ LEARN (Vantage Learn command)
    - ◦ DIM (Vantage Dim command)
    - ◦ PRESS (Presses the station button) - most common
    - ◦ RELEASE (Releases the station button)
    - ◦ PRESSRELEASE (Press and Release of the station button) - 2nd most common
  - ◦ STATION_LED_UPDATE
    - ▪ Arguments
      - • ADDRESS
        - ◦ Address of the station load (0-0-0)
      - • CHANGE_TO
        - ◦ OFF (turns off the Led)
        - ◦ ON (turns on the Led)
        - ◦ BLINK (blinks the Led)
  - ◦ CUSTOM_COMMAND
    - ▪ Arguments
      - • CMD (this is a custom Vcommand for Vantage.   Basically a direct input string to send vantage commands).
        - ◦ Note: does not require end character
  - ◦ TIM_FUNCTION
    - ▪ Arguments
      - • ADDRESS
        - ◦ Address of the Timer
      - • STATE
        - ◦ ON (Turns on the timer)
        - ◦ OFF (Turns off the timer)
- • Light Driver Actions
  - ◦ Standard Control4 light actions

Examples:

Send 'Lighting Scenes' to Vantage:

This example explains how to send pre-made Vantage scenes from Control4 (example: Goodnight, Home, Evening) etc… and a way to show them to your customer:

1. Create a Lighting Scene Under Advanced Lighting.   Do not add any lights to the scene

2. Click Room Visibility on the scene

3. Show all the lighting scene in all the rooms it needs to be shown in

4. Go to the Programming Tab and select Advanced Lighting

5. Find the Scene you created and choose Is Invoked

6. On the action side, Choose Vantage QLink Driver

7. Use Command PRESS_STATION_BUTTON

   a. Enter the Address of the station (X-X-X).

   b. Set CHANGE_TO to PRESSRELEASE

8. Add this command to the event

9. Test and Repeat if necessary

10. Test

Monitoring Vantage Keypad Button Pushes and using them in Control4 programing:
      This example shows how to properly use conditional programming to trigger actions from a Vantage Keypad to Control4.   The secret sauce is in the custom variable LAST_BUTTON_ADDRESS located under the main driver.   For reference we have included a picture of what a typical use of this would be.   In our picture we are turning 'ON' a Control4 dimmer when the LAST_BUTTON_ADDRESS is 1-1-1.

1. Turn on debug mode on the main Qlink driver and going to the lua tab.
2. Press the vantage button you want to monitor. The driver will give you an address of the button in x-x-x fashion (example 4-5-1). This is the button address you will need.
3. Under Control4 Programming tab/Vantage QLink Main Driver, choose the event Station Load Button PRESS.
4. Create a conditional based on the variable LAST_BUTTON_ADDRESS where the variable equals the button in questions address (see picture).
   a. Add this to the event and do your conditional programming off of this.

Notes:

- This driver contains code written by Cinegration.   Any modification to this driver or any driver written by Cinegration without the express consent will void all warranties, constitute a ban on all drivers released by Cinegration and potentially legal action.
- This driver has been designed to work with Control4® OS 2.6 and higher

Warranty:

Cinegration strives to provide fully working drivers without defects.   However, changes and bugs may be found.   Because of this, any bug/maintenance update to this driver will be free of charge.   However, due to the ever changing nature of computer and audio/video systems, if a new version of the Control4® software creates issues with this driver, or feature enhancements, an upgrade version will be provided for an additional expense or free as determined by Cinegration LLC.